

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR § 1.53(b))

|                        |                         |                      |  |
|------------------------|-------------------------|----------------------|--|
| Attorney Docket No     |                         | 1700.0180002/JAG/GER |  |
| First Inventor         |                         | Peter Sebbel         |  |
| Title                  | Molecular Antigen Array |                      |  |
| Express Mail Label No. |                         |                      |  |

**APPLICATION ELEMENTS**  
See MPEP chapter 600 concerning utility patent application contents.**ADDRESS TO:**Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

1. ☐ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 161]  
(preferred arrangement set forth below)  
- Descriptive title of the Invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table, or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 27]
5. Oath or Declaration [Total Pages     ]  
a. ☐ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)  
i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR §§ 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program  
(Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)  
a. ☒ Computer Readable Form (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☒ paper  
c. ☒ Statements verifying identity of above copies

1062 U.S. PTO  
09/048616  
05/04/01**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)  
Priority Claim Under 35 U.S.C. § 119(e) and 37 C.F.R. § 1.78(a)(4)  
☒ Other: The name of the assignee is: Cytos Biotechnology AG

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76.

☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No:      /       
Prior application information: Examiner      Group/Art Unit:     

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Label

Customer No. 26111



(Insert Customer No. or Attach bar code label here)

or ☐ Correspondence address below

|         |   |           |  |          |  |
|---------|---|-----------|--|----------|--|
| NAME    | STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. |           |  |          |  |
|         | Attorneys at Law PATENT TRADEMARK OFFICE  |           |  |          |  |
| ADDRESS |   |           |  |          |  |
| CITY    |   | STATE     |  | ZIP CODE |  |
| COUNTRY |   | TELEPHONE |  | FAX      |  |

|                   |               |                                   |        |
|-------------------|---------------|-----------------------------------|--------|
| NAME (Print/Type) | Grant E. Reed | Registration No. (Attorney/Agent) | 41,264 |
| SIGNATURE         |               | Date                              | 5/4/01 |

Burden Hour Statement: this form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

SKGF Rev 3/29/01 mac 018-2.NON-PROV.CVR.WPD



05/04/01

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DUSTIN T. JOHNSON\*\*  
MATTHEW J. DOWD\*\*

\*LIMITED TO MATTERS  
AND PROCEEDINGS BEFORE  
FEDERAL COURTS & AGENCIES  
\*\*REGISTERED PATENT AGENT  
\*\*\*SENIOR COUNSEL

May 4, 2001

WRITER'S DIRECT NUMBER:

(202) 789-5507

Commissioner for Patents  
Washington, D.C. 20231

Box Patent Application

Re: U.S. Non-Provisional Patent Application under 37 C.F.R. § 1.53(b)  
Appl. No. *To Be Assigned*; Filed: May 4, 2001  
For: **Molecular Antigen Array**  
Inventors: Sebbel *et al.*  
Our Ref: 1700.0180002/JAG/GER



Sir:

The following documents are forwarded herewith for appropriate action by the U.S.  
Patent and Trademark Office:

1. USPTO Utility Patent Application Transmittal Form (PTO/SB/05);
2. U.S. Utility Patent Application entitled:

**Molecular Antigen Array**

and naming as inventors:

Peter Sebbel,  
Nicolas Dunant,  
Martin Bachmann,  
Alain Tissot, and  
Franziska Lechner;

1700.0180002/JAG/GER

Commissioner for Patents  
May 4, 2001  
Page 2

the application consisting of:

- a. A specification containing:
    - i. 142 pages of description prior to the claims;
    - ii. 18 pages of claims (125 claims);
    - iii. a one (1) page abstract;
  - b. 27 sheets of drawings: (Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14A, 14B, 15A, 15B, 16A, 16B, 17, 18A, 18B, 18C, 18D, 19A, 19B, and 20);
  - c. 100 pages of a paper copy of the sequence listing;
  - d. A computer readable copy of the sequence listing. In accordance with 37 C.F.R. § 1.821(f), the paper copy of the sequence listing and the computer readable copy of the sequence listing submitted herewith in the above application are the same;
  - e. an Application Data Sheet (37 C.F.R. § 1.76);
3. Preliminary Amendment;
  4. Priority Claim Under 35 U.S.C. § 119(e) and 37 C.F.R. § 1.78(a)(4);
  5. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3) (*in duplicate*); and
  6. Two (2) return postcards.

The name of the assignee is **Cytos Biotechnology AG**.

Send correspondence to Customer Number 26111.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

Commissioner for Patents  
May 4, 2001  
Page 3

This patent application is being submitted under 37 C.F.R. § 1.53(b) without Declaration and without filing fee.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Grant E. Reed  
Attorney for Applicants  
Registration No. 41,264

Enclosures

018-2.NON-PROV.TRANS.WPD

| Table 1. Demographic characteristics of the study population     |            |
|--|------------|
| Age (years)  | 65.5 ± 1.2 |
| Gender (male/female)   | 10/10      |
| Education (years)  | 12.5 ± 0.5 |
| Occupation (white/blue)  | 10/0       |
| Marital status (married/divorced/widowed)                        | 10/0/0     |
| Health status (good/fair/poor)                                   | 10/0/0     |
| Smoking status (smoker/non-smoker)                               | 10/0       |
| Alcohol consumption (yes/no)                                     | 10/0       |
| Family history of heart disease (yes/no)                         | 10/0       |
| Previous heart disease (yes/no)                                  | 10/0       |
| Current heart disease (yes/no)                                   | 10/0       |
| Current hypertension (yes/no)                                    | 10/0       |
| Current diabetes (yes/no)  | 10/0       |
| Current cholesterol (yes/no)                                     | 10/0       |
| Current blood pressure (yes/no)                                  | 10/0       |
| Current heart rate (yes/no)                                      | 10/0       |
| Current weight (yes/no)  | 10/0       |
| Current height (yes/no)  | 10/0       |
| Current BMI (yes/no)   | 10/0       |
| Current waist circumference (yes/no)                             | 10/0       |
| Current hip circumference (yes/no)                               | 10/0       |
| Current waist-to-hip ratio (yes/no)                              | 10/0       |
| Current waist-to-height ratio (yes/no)                           | 10/0       |
| Current waist-to-hip ratio squared (yes/no)                      | 10/0       |
| Current waist-to-hip ratio cubed (yes/no)                        | 10/0       |
| Current waist-to-hip ratio to the fourth power (yes/no)          | 10/0       |
| Current waist-to-hip ratio to the fifth power (yes/no)           | 10/0       |
| Current waist-to-hip ratio to the sixth power (yes/no)           | 10/0       |
| Current waist-to-hip ratio to the seventh power (yes/no)         | 10/0       |
| Current waist-to-hip ratio to the eighth power (yes/no)          | 10/0       |
| Current waist-to-hip ratio to the ninth power (yes/no)           | 10/0       |
| Current waist-to-hip ratio to the tenth power (yes/no)           | 10/0       |
| Current waist-to-hip ratio to the eleventh power (yes/no)        | 10/0       |
| Current waist-to-hip ratio to the twelfth power (yes/no)         | 10/0       |
| Current waist-to-hip ratio to the thirteenth power (yes/no)      | 10/0       |
| Current waist-to-hip ratio to the fourteenth power (yes/no)      | 10/0       |
| Current waist-to-hip ratio to the fifteenth power (yes/no)       | 10/0       |
| Current waist-to-hip ratio to the sixteenth power (yes/no)       | 10/0       |
| Current waist-to-hip ratio to the seventeenth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the eighteenth power (yes/no)      | 10/0       |
| Current waist-to-hip ratio to the nineteenth power (yes/no)      | 10/0       |
| Current waist-to-hip ratio to the twentieth power (yes/no)       | 10/0       |
| Current waist-to-hip ratio to the twenty-first power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the twenty-second power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the twenty-third power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the twenty-fourth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the twenty-fifth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the twenty-sixth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the twenty-seventh power (yes/no)  | 10/0       |
| Current waist-to-hip ratio to the twenty-eighth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the twenty-ninth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the thirtieth power (yes/no)       | 10/0       |
| Current waist-to-hip ratio to the thirty-first power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the thirty-second power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the thirty-third power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the thirty-fourth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the thirty-fifth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the thirty-sixth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the thirty-seventh power (yes/no)  | 10/0       |
| Current waist-to-hip ratio to the thirty-eighth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the thirty-ninth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the fortieth power (yes/no)        | 10/0       |
| Current waist-to-hip ratio to the forty-first power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the forty-second power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the forty-third power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the forty-fourth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the forty-fifth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the forty-sixth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the forty-seventh power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the forty-eighth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the forty-ninth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the fiftieth power (yes/no)        | 10/0       |
| Current waist-to-hip ratio to the fifty-first power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the fifty-second power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the fifty-third power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the fifty-fourth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the fifty-fifth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the fifty-sixth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the fifty-seventh power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the fifty-eighth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the fifty-ninth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the sixtieth power (yes/no)        | 10/0       |
| Current waist-to-hip ratio to the sixty-first power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the sixty-second power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the sixty-third power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the sixty-fourth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the sixty-fifth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the sixty-sixth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the sixty-seventh power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the sixty-eighth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the sixty-ninth power (yes/no)     | 10/0       |
| Current waist-to-hip ratio to the seventieth power (yes/no)      | 10/0       |
| Current waist-to-hip ratio to the seventy-first power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the seventy-second power (yes/no)  | 10/0       |
| Current waist-to-hip ratio to the seventy-third power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the seventy-fourth power (yes/no)  | 10/0       |
| Current waist-to-hip ratio to the seventy-fifth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the seventy-sixth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the seventy-seventh power (yes/no) | 10/0       |
| Current waist-to-hip ratio to the seventy-eighth power (yes/no)  | 10/0       |
| Current waist-to-hip ratio to the seventy-ninth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the eightieth power (yes/no)       | 10/0       |
| Current waist-to-hip ratio to the eighty-first power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the eighty-second power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the eighty-third power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the eighty-fourth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the eighty-fifth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the eighty-sixth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the eighty-seventh power (yes/no)  | 10/0       |
| Current waist-to-hip ratio to the eighty-eighth power (yes/no)   | 10/0       |
| Current waist-to-hip ratio to the eighty-ninth power (yes/no)    | 10/0       |
| Current waist-to-hip ratio to the ninetieth power (yes/no)       | 10/0       |
| Current waist-to-hip ratio to the ninety-first power (yes/no)    | 10/0       |
|  |            |